

NF136/01

**We claim**

1. A process for identification of insulin producing  $\beta$ -cells proliferating factor from the peri-vitalline fluid of fertilized eggs of horseshoe crab that facilitates the proliferation of AR42J cells from rat origin.
2. A process as claimed in claim 1 wherein the process comprises collecting peri-vitalline fluid from the fertilized eggs of the Indian horseshoe crab.
3. A process as claimed in claim 1 wherein the peri-vitalline fluid is collected aseptically, aliquated and stored at  $-20^{\circ}$  C.
4. A process as claimed in claim 1 wherein the AR42J cell line (rat ascinar cells) obtained from American Type Culture Collection (Rockville MD, USA) was grown in Dulbeco's modified minimum essential medium supplemented with 10% FCS.
5. A process as claimed in claim 1 wherein the cells were maintained in NUNC six-well dishes (NUNCLON, Denmark).
6. A process as claimed in claim 1 wherein the a sub culture is done every 4<sup>th</sup> day of seeding of  $1 \times 10^5$  cells and the cultures were incubated at  $37^{\circ}$  C.
7. A process as claimed in claim 1 wherein the concentration dependent proliferation was observed in presence of peri-vitalline fluid.